

Application No. 09/833,965

REMARKS

The claims have been amended for the purposes of clarity. Also, claim 1 has been amended by incorporating the subject matter of claim 2 therein. Claim 2 has therefore been cancelled. In addition, the specification at pages 1 and 2 has been amended by inserting the missing application information.

Entry of the above amendments is respectfully requested.

Review and reconsideration on the merits are further requested.

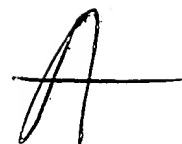
Applicants submit that formal drawings were prepared and filed along with filing of the present application. Therefore, Applicants do not understand the Examiner's request for formal drawing submission, since formal drawings were submitted with the Application as filed. Applicants request that the Examiner accept the drawings filed as formal drawings.

The Disclosure has been objected to because of various informalities. In response, Applicants have inserted the application numbers and filing dates on pages 1 and 2 of the present specification. Withdrawal of the objection to the Disclosure is respectfully requested.

Claims 1-15 and 17 have been rejected under 35 USC §112, second paragraph, as being indefinite. In response, Applicants have made the requested amendments to the claims for purposes of clarity. In response to Applicants amendments to the claims, Applicants request withdrawal of the rejection of claims 1-15 and 17 under 35 USC §112, second paragraph.

Claims 1-17 have been rejected under 35 USC §102(b) or 35 USC §102(e) as anticipated by, or in the alternative under 35 USC §103(a) as obvious over Hasegawa, et al., Caul, et al. Helland, et al., Ozawa, et al., Eadara, et al., Shaw-Klein, et al., Mammino, et al., Ninomiya, et al., or Lombardi, et al. In response, Applicants traverse the rejection.

The present application relates to an adhesive comprising a resin selected from the group consisting of polyvinyl butyral, phenolic resins, epoxy resins and mixtures thereof, and a first carbon filler comprising fluorinated carbon. None of the references teach or suggest the elements of the claims.



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K Beginning with Hasegawa, et al., this reference teaches a developer composition. A developer is used in the electrostatographic arts along with a toner in order to develop electrostatic latent images. [A developer does not have adhesive properties.] Therefore, because Hasegawa, et al. does not teach or suggest an adhesive material, Applicants submit that the present claims are not anticipated by the reference.

In addition, Applicants submit that one of ordinary skill in the art would not have been motivated to turn to a reference disclosing a developer in order to provide an adhesive as claimed. [Developer materials do not have adhesive properties at all.] In * fact, a developer must have anti-static properties so that the developer and toner do not attach to any of the components in the electrostatographic machine, such as the photoreceptor, transfer, fuser, or pressure member. It is important that the developer only adhere to the paper, which is the final print or copy substrate. The Office Action states that because the composition of Hasegawa, et al., is the same as Applicants and because they are made in the same manner, the claims are obvious in view of Hasegawa, et al. [However, the developer composition of Hasegawa, et al. includes numerous ingredients other than the elements of the present claim.] These ingredients make the developer have its developer properties and [not adhesive properties] In addition, Hasegawa, et al. does not teach that the developer is made in accordance with the teachings of the present specification as to how the current adhesive is made. There are no similarities in the processes at all.

Because Hasegawa, et al. does not teach any of the elements of the claims, including the adhesive, Applicants submit that the present claims are not anticipated or rendered obvious in view of Hasegawa, et al.

✓ Turning to Caul, et al., this reference teaches a coated abrasive product. Again, as with Hasegawa, et al., the reference does not teach or suggest an adhesive as claimed. At column 1, lines 14-20, it is recited that the invention relates to coated abrasives for the use of resin coatings on webs of cloth or paper to produce an article of commerce, which may be subsequently useful to produce coated abrasive materials. Applicants point out that the word "adhesive" in the Abstract is a typographic error and should be "abrasive." In addition, Caul, et al. does not teach a fluorinated carbon filler,

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but instead, teaches calcium carbonates as a filler at column 5, line 36 and in the Examples, and carbon black as the pigment. Because Caul, et al., does not teach or suggest an adhesive or fluorinated carbon as claimed, Applicants submit that the present claims are not anticipated by the reference.

In addition, Applicants submit that the present claims are not rendered obvious in view of the cited reference. Applicants submit that one of ordinary skill looking to provide an adhesive as claimed, would not have looked to a reference disclosing resins used in coated abrasive products for the making of cloth or paper products. Again, as with Hasegawa, et al., Caul, et al. teaches many ingredients above and beyond those recited in the present claims. In addition, the manner of making the resins of Caul, et al. is completely distinguishable from the manner of making the present adhesives as recited in the specification. Therefore, Applicants submit that the present claims are not anticipated nor rendered obvious in view of Caul, et al.

Turning to Helland, et al., this reference, as with Hasegawa, et al., teaches developer compositions. Applicants repeat the above arguments as to why the present claims are not anticipated nor rendered obvious in view of Hasegawa, et al., because Helland, et al. teaches a developer composition similar to the one disclosed in Hasegawa, et al. Briefly, developers are adhesive materials with anti-static properties, and not adhesive materials. In addition, the methods of making the developer composition as set forth in Helland, et al., are completely distinguishable from the methods taught in the present specification for making the adhesive.

In view of these arguments and in view of the arguments copied in the recitations above regarding Hasegawa, et al., Applicants submit that the present claims are not anticipated nor rendered obvious in view of Helland, et al.

Turning to Ozawa, et al., this reference teaches primer compositions and a rubber-to-metal bonding adhesive. Ozawa, et al. teaches that the primer composition comprising phenolic resins and carbon black silica. However, the primer composition is not an adhesive. The rubber-to-metal adhesive is taught at column 4, line 66 through column 5, line 4. The adhesive comprises polymers and copolymers of polar ethylenically unsaturated materials, halogenated rubbers and polyisocyanates. There is no teaching or suggestion in the reference of an adhesive comprising the elements as

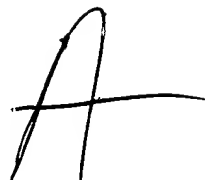
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claimed, including the claimed adhesive, resins and fluorinated carbon. Therefore, because Ozawa, et al. does not teach an adhesive material comprising elements of the present claims, but instead teaches a primer composition comprising a phenolic resin and carbon black silica, Applicants submit that the present claims are not anticipated or rendered obvious in view of the reference.

Turning to Eadara, et al., this reference teaches a thermoplastic hot melt adhesive comprising a phenolic antioxidant and a fluorocarbon surface active agent. A fluorocarbon is not a fluorinated carbon filler as claimed. At column 6, lines 47-66, the reference further teaches examples of extenders, reinforcing agents, fillers and pigments which can be employed in the epoxy resin. Included in the fillers are carbon fillers and carbon black. However, the reference does not teach or suggest a first fluorinated carbon filler as claimed. Therefore, because the reference does not teach or suggest the elements of the present claims, Applicants submit that the present claims are not anticipated by the reference.

Applicants further submit that the claims are not rendered obvious in view of the reference. Applicants point out that fluorinated carbon is different than carbon black or carbon fibers as set forth in Eadara, et al. Fluorinated carbon contains fluorine in addition to carbon, whereas carbon black and carbon fibers merely contain carbon. Fluorinated carbon reacts different when mixed with other compounds.

Applicants submit that one of ordinary skill in the art faced with the teachings of Eadara, et al, would not have been motivated to use a fluorinated carbon filler in combination with the claimed resins. A fluorinated carbon filler differs from carbon black or carbon fibers as taught by Eadara, et al., both in chemistry and in the mechanical and electrical and other physical properties of a filler. As set forth above, fluorinated carbon contains fluorine bonded to the carbon in various configurations. The addition of the fluorine changes the carbon filler significantly in terms of mechanical, physical, electrical and other properties. Therefore, Applicants that the present claims reciting a first fluorinated carbon filler in the adhesive are not rendered obvious in view of the teachings of Eadara, et al.



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Turning to Shaw-Klein, et al., this reference teaches a backing layer and not an adhesive. At column 1, lines 6-14, it is recited that the invention relates to an improved backing layer which is applied from an aqueous formulation and which is useful with flexible, digital, optical media, such as optical tape. However, the tape that the specification is referring to is not adhesive tape, but is optical tape. The backing layer is used to provide excellent performance with regard to runnability, scratch resistance, abrasive resistance, frictional properties and curl characteristics. The backing layer is not taught as used as an adhesive in Shaw-Klein, et al. In addition, Shaw-Klein, et al. teaches use of carbon black along with polyvinyl butyral, but does not teach or suggest use of fluorinated carbon

Because Shaw-Klein, et al. does not teach an adhesive as claimed, and further because Shaw-Klein, et al. does not teach or suggest use of a fluorinated carbon and an adhesive composition, Applicants submit that the present claims are not anticipated nor rendered obvious in view of the reference.

Turning to Mammino, et al., this reference relates to a biasable component used in electrostatography having a fluorinated carbon filled foam layer. The reference does not teach or suggest an adhesive comprising a fluorinated carbon, but instead teaches a biasable component having a foam layer comprising a fluorinated carbon. Because Mammino, et al. does not teach or suggest an adhesive, Applicants submit that the present claims are not anticipated by the reference.

In addition, Applicants submit that one of ordinary skill in the art would not have been motivated to look to a reference teaching fluorinated carbon filled foam biasable components when looking for ingredients to provide an adhesive. It would not have been obvious to one of ordinary skill, that a material listed for use in a fluorinated carbon filled foam biasable component would also work as an adhesive. In addition, epoxy resins are one type of resin listed in a huge laundry list of suitable polymers for use in the fluorinated carbon filled polymer foam layer starting at column 9, lines 8 and going all the way to column 11, line 41 of the reference. Therefore, because Mammino, et al. does not teach an adhesives, and further, because epoxy resin is set forth in a long laundry list of suitable polymers, and further because Mammino, et al., is related to

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fluorinated carbon filled foam biasable components, Applicants submit that the present claims are not rendered obvious in view of the reference.

In addition, Applicants point out that the biasable foam layer is taught as having many other ingredients than those as claimed, and is made completely different than the adhesive as set forth in the present specification. Again, Applicants submit the claims are not obvious in view of this reference.

Turning to Ninomiya, et al., this reference does not teach an adhesive. Instead the reference teaches a fiber-reinforced composite material. Carbon fibers are taught as the reinforcing fibers for use with the phenolic resin for the fiber-reinforced composite materials. The carbon resin is taught at column 4, starting at line 33. Applicants point out that the reference does not teach or suggest fluorinated carbon as a filler as claimed. Therefore, Applicants submit that the present claims are not anticipated by the reference because the reference does not teach an adhesive or a fluorinated carbon filler.

In addition, Applicants submit that the present claims are not rendered obvious in view of the cited reference. The reference relates to a fiber-reinforced composite material and does not teach or suggest an adhesive. Applicants submit that one of ordinary skill in the art would not have been motivated to look to a reference teaching a fiber-reinforced composite material when looking to provide an adhesive material as claimed. In addition, fluorinated carbon is a completely different filler than carbon fillers, and because of the differences in mechanical, physical, and other properties, Applicants submit that the use of fluorinated carbon is not obvious in view of the teachings of carbon fibers as taught by Ninomiya, et al. Therefore, Applicants submit that the present claims are not rendered obvious in view of the reference.

Turning to Lombardi, et al., this reference teaches thermoplastic polymer materials. The reference does not teach an adhesive. In addition, graphite, carbon black and carbon fiber are taught at column 4, lines 22-26 as being used along with the polymer material. However, the reference does not teach or suggest fluorinated carbon. In view of the fact that the reference does not teach an adhesive or fluorinated carbon filler, Applicants submit that the present claims are not anticipated by the reference.

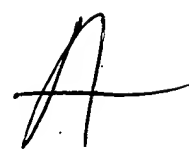
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Applicants further submit that the present claims are not rendered obvious in view of the teachings of Lombardi, et al. To begin with, Applicants submit that one of ordinary skill in the art would not have been motivated to look to a reference teaching water-soluble polymeric prototype elements in thermoplastic polymer materials when looking to provide an adhesive as claimed. In addition, Applicants again point out that fluorinated carbon is completely different in terms of mechanical, chemical, electrical and other properties as opposed to graphite, carbon black or carbon fiber as taught by Lombardi, et al. In view of the above, Applicants submit that the present claims are not rendered obvious in view of the reference.

Applicants point out that all of the references cited teach or suggest ingredients in addition to those of the present claims. Many different compositions may include the ingredients as claimed, in addition to others, and have completely different properties as compared to an adhesive as claimed. If the compositions share one or two ingredients, this does not make those compositions the same or obvious in view of one another. Furthermore, all of the references teach or suggest different ways of making each of the components, compounds or compositions recited in the references. None of the references teach or suggest the methods of making the present adhesive as taught in the present specification. In addition, none of the references teach or suggest the exact elements of the present claims. Therefore, Applicants do not agree with the Office Action that the compositions of the present claims are essentially the same and made in essentially the same manner as that taught by the references.

Applicants further point out that claims 16 and 17 further recite specific formulas of the fluorinated carbon. Mammino, et al. is the only reference that teaches the fluorinated carbon of claims 16 and 17. However, Mammino, et al. does not teach or suggest an adhesive as claimed. However, Applicants submit that claims 16 and 17 are further nonobvious in view of the cited references.

In view of the above arguments and amendments, Applicants submit that the present claims are not anticipated by nor rendered obvious in view of the cited references, and request withdrawal of the rejection of claims 1-17 under 35 USC §102(b) or (e) as anticipated by, or in the alternative, under 35 USC §103(a) as obvious



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over Hasegawa, et al., Caul, et al., Helland, et al., Ozawa, et al., Eadara, et al., Shaw-Klein, et al., Mammino, et al., Ninomiya, et al., or Lombardi, et al.

In view of the above arguments and amendments, Applicants submit that all claims are now in condition for allowance. Early indication of allowability is respectfully requested.

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation attorney (or agent) hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

In the event the Examiner considers personal contact advantageous to the disposition of this case, s/he is hereby authorized to call Applicant's Attorney, Annette L. Bade, at telephone number (310) 333-3682.

Respectfully submitted,



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December 11, 2002
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VERSION WITH MARKINGS TO SHOW CHANGES MADE:**IN THE SPECIFICATION**

Please substitute the following Cross Reference To Related Applications for the pending Cross Reference To Related Applications beginning on page 1, line 1 ending on page 2 line, 8 as follows:

Attention is directed to U.S. Patent Application Serial No. 08/004,636 (D/97525) filed January 8, 1998, entitled "Process and Apparatus for Producing an Endless Seamed Belt;" U.S. Patent Application Serial No. 09/493,445 (D/97525D), filed January 28, 2000, entitled "Process and Apparatus for Producing an Endless Seamed Belt;" U.S. Patent Application Serial No. 09/470,931 (D/99689) filed December 22, 1999, entitled, "Continuous Process for Manufacturing Imageable Seamed Belts for Printers;" U.S. Patent Application Serial No. 09/088,011, (D/97683), filed May 28, 1998, entitled, "Unsaturated Carbonate Adhesives for Component Seams;" U.S. Patent Application No. 09/615,444 (D/99598), filed July 13, 2000, entitled, "Polyimide Adhesive For Polyimide Component Interlocking Seams;" U.S. Patent Application No. 09/615,426 (D/99598Q), filed July 13, 2000, entitled, "Process For Seaming Interlocking Seams Of Polyimide Component Using Polyimide Adhesive;" U.S. Patent Application Serial No. 09/660,248 (D/99610), filed September 13, 2000, entitled, "Imageable Seamed Belts Having Fluoropolymer Adhesive Between Interlocking Seaming Members;" U.S. Patent Application Serial No. 09/660,249 (D/99610Q), filed September 13, 2000, entitled, "Imageable Seamed Belts Having Fluoropolymer Overcoat;" U.S. Patent Application Serial No. [-----] 09/833,930 (D/A0895), filed [-----] April 11, 2001, entitled "Imageable Seamed Belts Having Hot Melt Processable, Thermosetting Resin and Conductive Carbon Filler Adhesive Between Interlocking Seaming Members;" U.S. Patent Application Serial No. [-----] 09/833,488 (D/A0895Q1), filed [-----] April 11, 2001, entitled "Dual Curing Process for Producing a Puzzle Cut Seam;" U.S. Patent Application Serial No. [-----] 09/833,546 (D/A0584), filed [-----] April 11, 2001, entitled "Imageable Seamed Belts Having Polyamide Adhesive Between Interlocking Seaming Members;" and U.S. Patent Application Serial No. [-----] 09/833,507 (D/A0584Q), filed [-----] April 11, 2001, entitled "Polyamide and Conductive Filler

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Adhesive." The disclosures of each of these references are hereby incorporated by reference in their entirety.

IN THE CLAIMS

Amended Claims 1, 3, 5, 6, 10, 12, 13, and 17 for pending Claims 1, 3, 5, 6, 10, 12, 13 and 17 as follows:

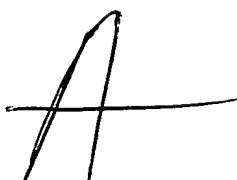
1. (Amended) An adhesive comprising a resin selected from the group consisting of polyvinyl butyral, phenolic resins, epoxy resins, and mixtures thereof, and a first carbon filler comprising a fluorinated carbon [filler].

Claim 2 has been cancelled.

3. (Amended) An adhesive in accordance with claim [2] 1, wherein said fluorinated carbon has the formula CF_x , wherein x is a number of from about 0.01 to about 1.5.

5. (Amended) An adhesive in accordance with claim [2] 1, wherein said fluorinated carbon is selected from the group consisting of a fluorinated carbon having about 28 percent by weight fluorine, a fluorinated carbon having about 11 percent by weight fluorine, a fluorinated carbon having about 62 percent by weight fluorine, and a fluorinated carbon having about 65 percent by weight fluorine, based on the weight of fluorinated carbon.

6. (Amended) An adhesive in accordance with claim 1, wherein said phenolic [resin is] resins are selected from the group consisting of nitrile [phenolic] phenolics, epoxy [phenolic] phenolics, and mixtures thereof.



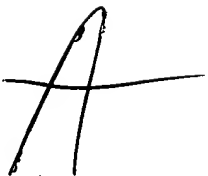
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10. (Amended) An adhesive in accordance with claim 1, further comprising a second filler selected from the group consisting of a carbon filler different from the first carbon filler, doped metal oxide filler, polymer filler, and mixtures thereof.

12. (Amended) An adhesive in accordance with claim 10, wherein said doped metal oxide filler[s] [~~comprise~~] comprises antimony doped tin oxide.

13. (Amended) An adhesive in accordance with claim 10, wherein said polymer [~~fillers are~~] filler is selected from the group consisting of polytetrafluoroethylene, polypyrrole, polythiophene, and polyaniline.

17. An adhesive comprising polyvinyl butyral and phenolic [~~resins~~] resin, and a fluorinated carbon selected from the group consisting of a fluorinated carbon having about 28 percent by weight fluorine, a fluorinated carbon having about 11 percent by weight fluorine, a fluorinated carbon having about 62 percent by weight fluorine, and a fluorinated carbon having about 65 percent by weight fluorine, based on the weight of fluorinated carbon.

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